



## 2011 Annual Report

### Purpose

This report is submitted to the General Assembly and the Department of Health and Environmental Control (DHEC) in order to fulfill the requirements of Title 44, Chapter 2 of the 1976 South Carolina Code of Laws, as amended. Specifically, Section 44-2-150(G) of the State Underground Petroleum Environmental Response Bank (SUPERB) Act requires the SUPERB Advisory Committee (the Committee) to submit an annual report that addresses the financial status and viability of the SUPERB Account and the SUPERB Financial Responsibility Fund (SFRF), the number of sites successfully remediated, the number of sites remaining to be remediated, and any statutory or regulatory changes the Committee recommends. In addition, this report contains information regarding the current status of the underground storage tank (UST) population in South Carolina.

### The SUPERB Accounts

Federal regulations (enacted in 1988) require UST owners or operators to demonstrate financial responsibility for corrective action and third party liability at \$1,000,000 per leak occurrence. The South Carolina General Assembly created the SUPERB Account in 1988 to assist UST owners and operators in meeting the corrective action portion of the federal financial responsibility requirements, and the SFRF was legislatively created in 1993 to assist owners and operators in meeting the third party liability requirement. UST owners and operators are responsible for a \$25,000 deductible per UST leak occurrence, and they remain liable for costs above \$1,000,000.

A ½ cent environmental impact fee imposed on each gallon of petroleum entering the state funds the SUPERB Accounts. The Department of Revenue collects the fee under the authority of Section 12-28-2355. Impact fee revenue received during calendar year 2011 totaled \$17,609,721.03, and the total revenue received including impact fee revenue, interest, and recovered funds totaled \$18,083,628.35 (Table 1). SUPERB payments during calendar year 2011 totaled \$16,346,527.73. As of December 31, 2011, a total of \$14,161,724.26 in SUPERB funds is committed through current contracts for site rehabilitation activities leaving an available SUPERB balance of \$4,084,087.13 (Table 1). The cumulative expenditures since 1998 total \$333,900,962.50.

**Table 1. SUPERB Account information as of December 31, 2011**

Impact Fee Revenue Received in Calendar Year 2011	\$ 17,609,721.03
Beginning Cash Balance January 1, 2010	\$ 16,508,710.77
Total Revenue Received in Calendar Year 2011	\$ 18,083,628.35
Total Available Calendar Year 2011	\$ 34,592,339.12
Total Payments from SUPERB in Calendar Year 2011	\$ -16,346,527.73
Cash Balance December 31, 2011	\$ 18,245,811.39
Commitments (Current Contracts)	\$ -14,161,724.26
Available for Commitment	\$ 4,084,087.13
Cumulative Spent Since 1988	\$ 333,900,962.50

### **SUPERB Financial Responsibility Fund (SFRF)**

DHEC is currently aware of 12 third party claims or suits and actively participates in their resolution as allowed for in Section 44-2-40 of the SUPERB Act. Two claims were settled in 2011 totaling \$33,000. A total of \$1,227,017.84 has been spent for claims, legal fees, and appraisal activities since the creation of this fund in 1993. As of December 31, 2011, the SFRF Balance was \$972,407.03.

### **Financial Responsibility for the State Fund Deductible**

The SUPERB Act requires that UST owners and operators demonstrate financial responsibility (FR) for \$25,000 per UST leak occurrence as the SUPERB Accounts provide the remaining required coverage. Allowable FR options include: self insurance, commercial insurance, insurance pool (risk retention group), guarantee, surety bond, letter of credit, trust fund, standby trust fund, and several local government options. Currently, sixty-five percent (65%) of UST facilities are covered by self-insurance, twenty percent (20%) by letters of credit or surety bonds, thirteen percent (13%) by commercial insurance, one-percent (1%) by local government options, and the remaining one-percent (1%) are exempt, in violation, or new owners.

### **Cleanup Progress**

As of December 31, 2011, DHEC has confirmed a total of 9,546 UST releases. Of these, 6,907 or about 72% have been closed. A total of 224 releases were closed in calendar year 2011; of these, 136 were closed with SUPERB funds. Twelve of the 224 closures required engineered cleanup systems and were closed after cleanup actions were completed. Cleanups requiring engineered systems, often referred to as active cleanups, can take more than five years to complete.

At year's end, there were 2,639 open releases, of which 2,599 are eligible to receive SUPERB funds. Confirmed releases are ranked by DHEC for funding priority according to the risk each poses. The priority system is outlined in the SUPERB Fund Access Regulations (R.61-98). Appendix 1 of this report depicts the total number of SUPERB eligible releases by their risk category and Appendix 2 depicts this number by county. Appendix 3 depicts the number of cases, by risk category, where rehabilitation activity is being funded and the number where no funding is provided.

As of December 31, 2011, 167 releases were in active cleanup, 124 releases were in limited cleanup with free product removal activities being conducted, and 269 releases were being monitored as part of a formalized natural attenuation remedial plan. Assessment activities were being funded at another 711 sites. A total of 1,271 releases were receiving SUPERB funding at year's end. For the most part, site rehabilitation activities are funded by SUPERB or by the UST owner under the \$25,000 SUPERB deductible.

At year's end, fifteen (15) DHEC project managers were overseeing environmental assessment or cleanup efforts on 2,348 releases being worked with SUPERB funds or under the \$25,000

deductible. Two of the fifteen project manager positions were vacated in January 2012, and the Division is seeking approval to fill the vacancies in the Assessment Section so that productivity is not limited.

### **Quality Assurance Program Plan**

On July 1, 2011 the UST Program commenced implementation of the Quality Assurance Program Plan (QAPP). The Environmental Protection Agency (EPA) approved the SC UST Program QAPP in June 2011. The purpose of the QAPP is to ensure that all data produced and reported to the Department is scientifically valid, legally defensible, and of known and acceptable precision and accuracy. Between July 1, 2011 and December 31, 2011, 528 reviews of QAPP Addendums were completed. The average time to complete each review was eight days. Twelve of the 528 reviews (2.27%) exceeded the program standard of 30 days. Most QAPP addendums needing correction have been approved after only one rewrite. Since the implementation date, UST Program staff has worked closely with contractors to facilitate this process. Allowable rates for payment from the SUPERB Account have been adjusted where needed to allow for the additional effort and data production required.

### **Underground Storage Tank Information**

Since 1986, there have been 45,606 petroleum USTs registered with DHEC. Of those, 32,924 have been removed from the ground or properly closed in place. As of December 31, 2011, there were 11,782 operating USTs at 4,151 locations across the state owned by 2,094 individuals or companies.

On a quarterly basis, EPA requires reporting on the UST compliance rate for both release prevention and release detection, commonly referred to as significant operational compliance (SOC). DHEC reported that 79% of the approximately 3,645 UST facilities inspected during 2011 met both the release prevention and release detection requirements and were in significant operational compliance. The overall compliance rate for 2011 has increased to 79% from the previous year's report of 77%. DHEC attributes the increased SOC rate due to the UST Program implementing an operator training program in 2010 and 2011. The training helped the owners and operators better understand operational issues and equipment maintenance. With this increased knowledge, fewer violations were issued.

The Committee encourages UST owners and operators, as well as DHEC, to provide greater emphasis on release prevention and early detection so as to minimize the number of new releases and their severity when they do occur. Prevention measures are in the best interest of owners and operators, the environment, and the SUPERB Fund.

### **Leak Rate**

Leak rate is defined as the total number of confirmed releases from registered and permitted tanks, divided by the total number of currently in use tanks. For 2011 reporting period, 70 confirmed releases were reported from a tank population of 11,782 operating USTs, calculating a leak rate of

0.59%. This percentage is lower than the 0.82% reported for 2010, and 0.98% reported for 2009.

### **Legislative Information**

An actuarial study of the SUPERB fund, completed in March 2007, listed the current liabilities of the fund at \$153 million and estimated future liabilities at \$373 million. The fund was projected to have a negative balance of \$32 million at the scheduled sunset date in 2026. The EPA has voiced concerns about solvency of the SUPERB fund since the late 1990's in mid-year and year-end grant reviews provided to DHEC, and in September of 2007 DHEC received official notice from EPA Region IV that the SUPERB Fund is in danger of being declared insolvent. The result of insolvency would be the disapproval of the SUPERB fund as an accepted financial responsibility mechanism, requiring UST owners and operators to obtain alternate coverage for their required minimum of \$1 million in liability coverage to pay for cleanup and third party damage claims, per occurrence.

DHEC consulted with South Carolina Petroleum representatives and ultimately developed a funding solution with EPA Region 4, EPA Headquarters Office of Underground Storage Tanks, and the SUPERB Advisory Committee. The solution proposed in October 2007 was to acquire an additional \$8 million per year over five years to move the SUPERB fund toward being a viable financial responsibility mechanism. This \$40 million was in addition to the \$5 million special appropriation received in November 2007 for state FY 2008. During 2008, the petroleum industry was successful in securing an additional \$4 million for the SUPERB fund above the expected impact fee revenue; therefore, the SUPERB funding solution as proposed in October 2007, required an additional \$36 million. In January 2009, Bill H. 3270 was introduced through industry-led efforts to address SUPERB solvency by amending Section 44-2-60 Code of Laws of South Carolina, relating to the registration of underground storage tanks so as to establish new annual renewal fees and to require that the additional revenue generated from the tank fee increases be deposited into the SUPERB account. Bill H.3270 was signed by the Governor and made effective on May 19, 2010.

Beginning January 1, 2012, the amended SUPERB Act increases annual tank fees by \$100 each year over four years, ultimately reaching \$500 per tank, and maintains the fee at this level until an additional \$36 million is generated and deposited into the SUPERB account. When the SUPERB account is credited with the additional \$36 million, the annual tank fee will revert back to \$100 per tank the following January. DHEC will not be allowed to use any of the additional tank fee revenue for administration of the UST Program or for orphan sites as defined in 44-2-20(11). The additional monies will be collected following the June 1, 2012 billing cycle for tank fees.

Considering the recent budget challenges faced by South Carolina, DHEC views this industry-led effort as a resolution to the long-term funding solution for the SUPERB account. In recent correspondence, the EPA fully endorsed the funding solution incorporated in the 2010 legislation to address the solvency of SUPERB.

### **Proposed Revisions to Federal Regulations**

EPA's proposed revisions to the federal UST regulations Part 280 and 281 were published in a November 8, 2011 Federal Register Notice and made available for a public comment period. The deadline to submit comments was February 16, 2012 which has been extended by 60 days until April 16, 2012. Major revisions pertain to incorporating the provisions of the Energy Policy Act of 2005, inclusion of tanks that were deferred in 1988 version and to update the regulations with new and recent information related to regulating UST systems. These revisions will help improve prevention and detection of UST releases, which are one of the leading sources of groundwater contamination. Areas where revisions are proposed include: updating codes of practice, operator training requirement, secondary containment requirements, removing deferrals, notification process, addressing compatibility issues, interstitial monitoring, upgrade requirements, state approval program requirements, etc.

### **Operator Training**

With the advent of the Energy Policy Act of 2005 and in accordance with UST Control Regulations R.61-92, Part 280.35, all owners/operators of underground storage tanks in South Carolina were required to complete operator training before August 8, 2011. Two years before the deadline, the UST Program began coordinating efforts to notify and train owners/operators from almost 4,200 facilities with the development of a free on-line operator-training course located on the DHEC internet. The online training has proven to be a valuable resource for owners with limited time and resources. Along the way, owners who were unable to complete the training online were identified and either received personal visits from staff that walked them through the training, or were provided an opportunity to attend one of four classroom-training sessions that were conducted across the state. At the deadline, 91% of owners/operators had completed the training. With continued effort from the UST program, that number increased to well over 97 % (approximately 4,000 facilities trained) as of December 31, 2011. South Carolina leads the way in operator training in EPA Region 4.

### **Recommendations**

Recommendations approved during the Tuesday February 14, 2012 SAC meeting are:

- 1) Highlight the leak rate in the 2011 SAC Report. Report has been revised accordingly.
- 2) Provide information related to compliance rate. Report has been revised accordingly.
- 3) Attach the letter from EPA indicating their support and approval of the solvency method.
- 4) DHEC should include in their annual budget request to the SC General Assembly funding for the deficit in the SUPERB account as identified during the fund solvency study.

# Appendix 1

## **SUPERB Eligible Releases by Risk Category As of December 31, 2011**

<b>Risk Category</b>	<b>Open Releases</b>
1	177
2A	124
2B	876
3A	50
3B	915
4A	189
4B	132
5	136
<b>Total</b>	<b>2,599</b>

### **Risk Category Definitions:**

- Category 1    Emergency
- Category 2A    Threat to human health or environment is predicted to be less than 1 year
- Category 2B    Drinking well identified less than 1,000 feet away
- Category 3A    Threat to human health or the environment is predicted to be 1 to 2 years
- Category 3B    Release in shallow groundwater with migration expected
- Category 4A    Threat to human health or the environment is predicted to be greater than 2 years
- Category 4B    Release in shallow groundwater with minimal migration expected
- Category 5    Data currently inconclusive

# Appendix 2

## SUPERB Eligible Releases by Risk Category and County as of December 31, 2011

County	Risk Category								Total
	1	2A	2B	3A	3B	4A	4B	5	
Abbeville	0	1	13	0	3	3	2	0	22
Aiken	3	0	14	1	10	3	3	7	41
Allendale	0	0	4	0	10	0	2	1	17
Anderson	0	0	17	0	41	9	4	6	77
Bamberg	0	1	9	0	7	1	1	0	19
Barnwell	0	3	13	1	6	1	0	1	25
Beaufort	2	2	11	3	9	1	0	0	28
Berkeley	2	0	13	1	24	0	1	1	42
Calhoun	0	0	1	0	4	0	2	0	7
Charleston	1	3	17	0	78	0	3	4	106
Cherokee	2	1	11	0	9	3	3	0	29
Chester	3	4	18	0	8	2	3	5	43
Chesterfield	1	2	6	1	9	1	1	2	23
Clarendon	4	0	27	2	21	0	4	4	62
Colleton	2	3	13	0	9	0	0	1	28
Darlington	1	1	24	1	16	1	6	2	52
Dillon	9	2	11	1	11	0	3	1	38
Dorchester	3	0	18	1	24	1	1	0	48
Edgefield	1	0	5	1	3	0	2	3	15
Fairfield	6	1	8	0	2	0	0	2	19
Florence	11	9	48	2	69	2	12	2	155
Georgetown	2	2	14	2	17	0	0	1	38
Greenville	6	10	58	2	53	36	15	22	202
Greenwood	5	1	15	1	8	9	3	3	45
Hampton	0	3	13	0	11	0	2	3	32
Horry	10	10	59	11	75	0	4	4	173
Jasper	1	5	23	1	8	0	0	1	39
Kershaw	0	4	13	0	8	3	1	4	33
Lancaster	3	2	23	4	17	7	10	4	70
Laurens	3	0	21	0	14	9	0	1	48
Lee	1	3	6	0	2	1	0	1	14
Lexington	7	3	34	2	45	6	7	9	113
Marion	3	0	26	1	25	0	0	1	56
Marlboro	5	2	15	0	12	1	1	1	37
McCormick	1	0	7	0	6	1	0	1	16
Newberry	3	2	15	0	16	3	5	2	46
Oconee	1	2	8	0	3	5	0	0	19
Orangeburg	8	6	32	2	29	1	3	2	83
Pickens	1	1	6	0	5	7	2	0	22
Richland	16	7	41	0	48	9	6	4	131
Saluda	3	0	2	0	8	0	2	0	15
Spartanburg	8	3	39	7	63	50	12	6	188
Sumter	8	12	37	1	18	0	1	4	81
Union	1	2	4	0	3	0	0	2	12
Williamsburg	6	6	22	1	15	0	2	4	56
York	26	5	41	0	31	11	3	4	121

### Risk Category Definitions:

Category 1	Emergency
Category 2A	Threat to human health or environment is predicted to be less than 1 year
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Category 3A	Threat to human health or the environment is predicted to be 1 to 2 years
Category 3B	Release in shallow groundwater with migration expected
Category 4A	Threat to human health or the environment is predicted to be greater than 2 years
Category 4B	Release in shallow groundwater with minimal migration expected
Category 5	Data currently inconclusive

## Appendix 3

### SUPERB Eligible Releases by Risk Category Work Ongoing or Not Currently Working As of December 31, 2011

<b>Risk Category</b>	<b>Work Currently Ongoing With SUPERB Funds or Under the \$25,000 Deductible</b>	<b>Not Currently Working Awaiting SUPERB Funding</b>
1	177	0
2A	72	52
2B	530	346
3A	24	26
3B	365	550
4A	55	134
4B	42	90
5	47	89
Total	1312	1287

#### **Risk Category Definitions:**

Category 1 Emergency

Category 2A Threat to human health or environment is predicted to be less than 1 year

Category 2B Drinking well identified less than 1,000 feet away

Category 3A Threat to human health or the environment is predicted to be 1 to 2 years

Category 3B Release in shallow groundwater with migration expected

Category 4A Threat to human health or the environment is predicted to be greater than 2 years

Category 4B Release in shallow groundwater with minimal migration expected

Category 5 Data currently inconclusive